

# Staff Summary Report



Development Review Commission Date: 06/12/07

Agenda Item Number: 4

**SUBJECT:** Hold a public hearing for a Use Permit and Development Plan Review for SELF-SERVE CAR WASH located at 1336 West University Drive.

**DOCUMENT NAME:** DRCr\_SelfServeCarwash\_061207

**PLANNED DEVELOPMENT (0406)**

**SUPPORTING DOCS:** Yes

**COMMENTS:** Request for **SELF-SERVE CAR WASH (PL060720)** (Kay Hamblin, property owner; John Reddell Architects, applicant) for the redevelopment of an existing car wash into a new car wash totaling 3,191 s.f. in building area, located at 1336 West University Drive, in the CSS, Commercial Shopping and Service District, including the following:

**ZUP06107** – Use Permit to allow the expansion of an existing car wash.

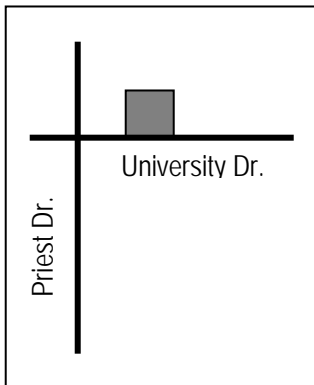
**DPR06134** – Development Plan Review including site plan, building elevations and landscape plan

**PREPARED BY:** Ryan Levesque, Senior Planner (480-858-2393)

**REVIEWED BY:** Lisa Collins, Planning Director (480-350-8989) 

**RECOMMENDATION:** Staff – Approval, subject to conditions (1-25).

## ADDITIONAL INFO:



Net site area	0.47 acres
Building area	3,191 s.f. (+1,800 s.f. vacuum canopy)
Lot Coverage	25 % (50% maximum allowed)
Building Height	26 ft (35 ft maximum allowed)
Building setbacks	0' front, 58' west side, 54' east side, 31' rear
Landscaped area	15% (15% minimum required)
Vehicle Parking	14 spaces (13 min. required)
Bicycle Parking	4 (4 minimum required)

A neighborhood meeting is not required with this application.

This is a request to redevelop an existing self-serve car wash to allow a new self-serve car wash including an automatic wash bay and separate vacuum bays. At this time, no public input has been provided. Staff recommends approval of this request subject to the conditions of approval. On February 27, 2007 a continuance was granted from the Development Review Commission to March 27, 2007. **On March 27, 2007 the Development Review Commission continued the request to June 12, 2007 for the applicant to address noise decibel levels from the facility.**

**ATTACHMENTS:**

1. List of Attachments
- 2-4. Comments / Reasons for Approval
- 5-9. Conditions of Approval
9. History & Facts / Zoning & Development Code Reference
  
- A. Location Map
- B. Aerial Photo
- C. Letter of Explanation
- D. Site Plan
- E. Building Elevations/Sections
- F. Floor Plans
- G. Landscape Plan
- H. Conceptual Grading and Drainage Plan
- I. Security Plan
- J. **Existing/Proposed Sound Level Diagram**
- K. **Acoustical Consultant's Analysis**
- L. **Vacuum Details**

## **COMMENTS:**

The applicant is requesting an approval for a use permit to allow a new self-serve car wash, including a development plan review for a new building. Self serve vacuum bays are proposed at the west end of the property. The site is located near the northeast corner of University Drive and Priest Drive. To the west is an existing gas station, and to the east are some existing commercial businesses. To the north of this property is an apartment complex. The project site is currently a coin operated self-serve car wash, oriented towards the street. Self-serve vacuum bays are located directly behind the wash bays. An abandoned gas fueling station was once provided at this site.

### **Use Permit**

This development includes a use permit request to allow a car wash within the CSS, Commercial Shopping and Service District. This request includes four self-serve wash bays and one drive-through automatic wash bay with air dryer. Proposed to the west of the property are six self-serve vacuum bays underneath a canopy. The wash bays are oriented in an east west direction, providing some sound relief to the apartment complex to the north. In order to further reduce sound impacts for the residents, staff has recommended eliminating two of the proposed vacuum stalls to the north and relocating the refuse enclosure at that location. This will provide a greater separation from the apartment complex with the refuse enclosure and new masonry wall. Self-serve car washes are typically open 24 hours a day. Due to the close proximity of a residential use and the potential increase of crime with unmanned car washes, staff recommends limiting the hours of operation from 7 am to 12 am.

### **Design**

The proposal includes a single-story building with a maximum building height of twenty-six (26) feet. The building is composed of masonry materials, utilizing a split-face block at the base and scored CMU above, which also outlines the building edges. The rest of the buildings façade is covered with red "Founders Block". The car wash building, including the vacuum canopy and walls are all designed with the same contextual pattern providing an overall complementary design.

### **Public Input**

At this time no public input has been provided on this request. Public hearing signage was posted on this site at least fifteen (15) days prior to the public hearing and property owners and nearby Neighborhood Association(s) received a hearing notice letter. Staff had left a message to the management of the apartments to the north to ask if there were any complaints from the residents regarding noise. There was no response or contact from the management at this time.

### **Conclusion**

The redevelopment of this site from an existing car wash into a new wash facility, with additional wash bays, will provide a great improvement to this location. The new facility design with added security measures will provide the community with an overall site that is compatible with the surrounding context.

### **UPDATE**

Since the last hearing (3/27/07), the applicant has hired a sound consultant to provide recommendations to address the car wash noise decibels. Identified within the attached letter (Attachment K) the consultant has recommended providing enclosures for the vacuum units for additional sound buffering. Staff has added a condition based on this recommendation. This sound mitigation addresses one component of the project, but sound issues are still prevalent from the automatic wash bay with air dryer, and any noise generated from customers, including car radio's and loud vehicle exhausts. Therefore, staff is still recommending limitations on the hours of operation. Staff had previously recommended incorporating roll down bay doors for all wash bays. Since the previous hearing the applicant had provided a more detailed security plan. Staff is withdrawing the previous condition for bay doors and instead has conditioned that token only equipment is provided. This will reduce the potential for crime at the site because of the location and

positioning of the bays is less visible from the street. The coin changer is located towards the front of the building in a more visible area to the public. With the proposed conditions, which include limiting the hours of operation, will provide adequate security measures and limit any potential nuisances from noise at the site. Staff recommends approval of this request, subject to conditions.

## **USE PERMIT**

### **APPROVAL CRITERIA:**

1. The use covered by the permit, the manner of its conduct, and any building which is involved, will not be detrimental to persons residing or working in the vicinity, to adjacent property, to the neighborhood, or to the public welfare in general, and that the use will be in full conformity to any conditions, requirements, or standards prescribed therefore by the Zoning and Development Code;
2. There appears to be no significant increase in vehicular or pedestrian traffic. *The use is no more intense than other commercial businesses located on the site;*
3. There appears to be no nuisances arising from the emission of odor, dust, gas, noise, vibration, smoke, heat, or glare at a level exceeding that of ambient conditions. *With the conditioned time limitations for the car wash's operation and the additional separation provided from vacuum bays to the apartment complex, including new screen walls, and additional sound mitigation from the design of the vacuum equipment, there appears to be sufficient remediation from noise;*
4. This use will not contribute to the deterioration of the neighborhood or to the downgrading of property values, which is in conflict with the goals, objectives or policies for rehabilitation, redevelopment or conservation as set forth in the city's adopted plans or General Plan. *The redevelopment of this property will provide a much improved car wash facility.*
5. The location is compatible with existing surrounding structures and uses. *Current use on this site will maintain a self-serve car wash. The adjacent sites will benefit from added security of the adjacent property boundaries with the addition of masonry walls and picket fencing; and*
6. There are no findings of disruptive behavior both inside and outside the premises, which may create a nuisance to the surrounding area or general public. *This request will process a security plan with the Police Department to ensure that unauthorized activities are minimized. Proposed conditions intend to mitigate any concerns for any potential disruptive behavior which may occur on the site, thus impacting the adjacent neighbors.*

## **DEVELOPMENT PLAN REVIEW**

### **APPROVAL CRITERIA:**

1. The placement of buildings reinforces and provides variety in the street wall, maximizes natural surveillance and visibility of pedestrian areas (building entrances, pathways, parking areas, etc.), enhances the character of the surrounding area, facilitates pedestrian access and circulation and mitigates heat gain and retention through:
  - a. Materials shall be of superior quality and compatible with the surroundings;
  - b. *Buildings and landscape* elements have proper scale with the site and surroundings;

- c. Large *building* masses are divided into smaller components that create a human-scale as viewed from the sidewalk;
- d. *Buildings* have a clear base and top, as identified by ground floor elements, *roof* forms, and detailing;
- e. *Building* facades have architectural detail and contain windows at the ground level to create visual interest and to increase security of adjacent outdoor spaces by maximizing natural surveillance and visibility;
- f. Special treatment of doors, windows, doorways and walkways (proportionality, scale, materials, rhythm, etc.) contributes to attractive public spaces;
- g. On-site utilities are placed underground;
- h. Clear and well lighted walkways connect *building* entrances to one another and to adjacent sidewalks;
- i. *Accessibility* is provided in conformance with the Americans With Disabilities Act (ADA);
- j. Plans take into account pleasant and convenient access to multi-modal transportation options, and support the potential for transit patronage;
- k. Vehicular circulation is designed to minimize conflicts with pedestrian access and circulation, and with surrounding residential uses. Traffic impacts are minimized, in conformance with city transportation policies, plans, and design criteria;
- l. Safe and orderly circulation separates pedestrian and bicycles from vehicular traffic;
- m. Plans appropriately integrate crime prevention principles such as territoriality, natural surveillance, access control, activity support, and *maintenance*;
- n. Landscaping accents and separates *parking*, *buildings*, driveways and pedestrian walkways;
- o. Lighting is compatible with the proposed *building(s)* and adjoining *buildings* and uses, and does not create negative effects.

## ZUP06107

### CONDITIONS OF APPROVAL:

1. The use permit is valid for Kay Hamblin, SELF-SERVE CAR WASH and may be transferable to successors in interest through an administrative review with the Development Services Manager, or designee.
2. The business hours of operation for the car wash and vacuum bays shall be limited from 7 am to ~~8 pm~~ **12 am. (MODIFIED BY STAFF)**

~~Roll down bay doors, or a similar enclosure, shall be provided on both sides of all wash bays and roll over bay. The bay doors shall remain closed during non-operational hours. (DELETED BY STAFF)~~

3. Vacuum bays shall be limited to no more than four (4) stalls, eliminating the two (2) proposed vacuum bay stalls to the north and replaced with landscape.
4. **The car wash facility shall utilize TOKEN ONLY coin-operated equipment, providing additional security for the site and its patrons. (ADDED BY STAFF)**
5. If there are any complaints arising from the use permit that are verified by a consensus of the complaining party and the City Attorney's office, the use permit will be reviewed by city staff to determine the need for a public hearing to re-evaluate the appropriateness of the use permit.
6. Any intensification or expansion of this use shall require the applicant to return to the appropriate decision-making body for a new use permit.

## DPR06134

### CONDITIONS OF APPROVAL:

7. Your drawings must be submitted to the Development Services Building Safety Division for building permit by **February 27, 2008** or Development Plan approval will expire.
  8. **The vacuum units shall be enclosed within an additional sound dampening component to reduce noise levels. (ADDED BY STAFF)**
- The project site does not have an Archaeologically Sensitive designation. However, State and federal laws apply to the discovery of features or artifacts during site excavation (typically, the discovery of human or associated funerary remains). Where such a discovery is made, contact the Arizona State Historical Museum (520-621-6302) for removal and repatriation of the items. Contact the Tempe Historic Preservation Officer (Joe Nucci 480-350-8870) if questions regarding the process described in this condition.
  - Security plan required for car wash. To avoid revisions to permitted construction documents, initial meetings with the Police Department regarding the security plan are recommended before building permits are issued. At a minimum, the Owner shall contact Officer Derek Pittam or Officer Jeff Lane of the Police Department (480-858-6341) to begin security plan process approximately eight weeks prior to receipt of certificate of occupancy.
  - Specific requirements of the **Zoning and Development Code** are not listed as a condition of approval, but will apply to any application. To avoid unnecessary review time, and reduce the potential for multiple plan check submittals, it is necessary that the applicant be familiar with the Zoning and Development Code (ZDC), as amended.

- Standard Details:
  - a. Tempe Standard "T" details may be accessed through [www.tempe.gov/engineering](http://www.tempe.gov/engineering) or purchased from the Engineering Division, Public Works Department.
  - b. Tempe Standard "DS" details for refuse enclosures may be accessed through [www.tempe.gov/tdsi/bsafety](http://www.tempe.gov/tdsi/bsafety) or may be obtained at Development Services.

#### **SITE PLAN:**

9. The property owner shall dedicate to the City, fifteen (15) feet of property frontage for the purpose of creating a fifty-five (55) feet right-of-way half street, which shall be recorded prior to issuance of building permits.
  10. Refuse:
    - a. Locate refuse enclosure to northwest area of property, providing landscape on either sides of enclosure.
    - b. Construct walls, pad and bollards in conformance with Standard Detail DS-116 for a single container.
    - c. Gates for refuse enclosure(s) are not required. If gates are provided, the property manager must arrange for gates to be open from 6:00am to 4:30pm on collection days.
  11. Walls:
    - a. Provide a new eight (8) foot high CMU wall along the north property line, extending to the building to the west.
    - b. Provide an eight (8) foot high steel vertical picket fence at the northwestern perimeter of the property extending to the adjacent existing building for access control.
    - c. Obtain authorization from adjacent property owners in order to extend perimeter fencing to buildings.
    - d. Provide additional parking screen walls, maximum three (3) feet in height, along property perimeter near parking spaces. **An additional three (3) feet of wrought iron above the screen wall shall be provided along the western perimeter. (MODIFIED BY STAFF)**
  12. Provide upgraded paving at each driveway apron consisting of unit paving along University Drive. Extend unit paving in the driveway from the back of the accessible public sidewalk bypass to 20'-0" on site and from curb to curb at the drive edges.
  13. Place exterior, freestanding reduced pressure and double check backflow assemblies in pre-manufactured, pre-finished, lockable cages (one assembly per cage). If backflow prevention or similar device is for a 3" or greater water line, delete cage and provide a masonry or concrete screen wall following the requirements of Standard Detail T-214.
  14. Utility equipment boxes for this development shall be finished in a neutral color (subject to utility provider approval) that compliments the coloring of the buildings.
- 100 year onsite retention required for this property, coordinate design with requirements of the Engineering Department. Provide review and written authorization from the Arizona Department of Environmental Quality on proposed method of storm water discharge before Engineering review and permitting of grading and drainage plan.
  - Fire lanes need to be clearly defined. Provide a 45' turning radius for fire and refuse access around northern portion of building. Ensure that there is at least a 20'-0" horizontal width, and a 14'-0" vertical clearance from the fire lane surface to the underside of tree canopies; or overhead structure, if allowed by Fire Department. Details of fire lane(s) are subject to approval of the Fire Department (Jim Walker 480-350-8341).
  - All new and existing, as well as on-site and off-site, utility lines (other than transmission lines) shall be

placed underground prior to the issuance of an occupancy permit for this (re)development in accordance with the Code of the City of Tempe - Section 25.120.

- Verify location of any easements, or property restrictions, to ensure no conflict exists with the site layout or foundation design.
- Provide 8'-0" wide public sidewalk along University Drive, as required by Traffic Engineering Design Criteria and Standard Details.
- Construct driveways in public right of way in conformance with Standard Detail T-320. Alternatively, the installation of driveways with return type curbs as indicated, similar to Standard Detail T-319, requires permission of Public Works/Traffic (Shelly Seyler 480-350-8219)
- Correctly indicate clear vision triangles at both driveways on the site and landscape plans. Consult "Corner Sight Distance" leaflet, available from Development Services Counter or from John Brusky in Transportation (480-350-8219) if needed. Do not locate site furnishings, screen walls or other visual obstructions over 2'-0" tall (except canopy trees are allowed) within each clear vision triangle.
- Verify conformance of accessible vehicle parking to the Americans with Disabilities Act of 1990 (42 U.S.C.A. §12101 ET SEQ.) and the Code of Federal Regulations Implementing the Act (28 C.F.R., Part 36, Appendix A, Sections 4.1 and 4.6). Refer to Standard Detail T-360 for parking layout and accessible parking signs.
- Provide parking loop/rack per standard detail T-578. Provide 2'-0" by 6'-0" individual bicycle parking spaces. One loop may be used to separate two bike parking spaces. Provide clearance between bike spaces and adjacent walkway to allow bike maneuvering in and out of space without interfering with pedestrians, landscape materials or vehicles nearby.

#### **FLOOR PLANS:**

15. Vending machines integrated into the building shall provide secured fencing to prevent vandalism.

#### **BUILDING ELEVATIONS:**

~~Bay doors shall be painted and have a color that is consistent with the approved color palette.~~ **(REMOVED BY STAFF)**

16. Provide main colors and materials with a light reflectance value of 75 percent or less. Specific colors and materials exhibited on the materials sample board are approved by planning staff. Submit any additions or modifications for review during building plan check process. Planning inspection staff will field verify colors and materials during the construction phase.
17. Provide secure roof access from the interior of the building. Do not expose roof access to public view.
18. Conceal roof drainage system within the interior of the building. Minimize visible, external features, such as overflows, and where needed design these to enhance the architecture of the building. Building roof drainage shall be designed in a way to maintain run-off on site.
19. Incorporate lighting, address signs, incidental equipment attachments (alarm klaxons, security cameras, etc.) where exposed into the design of the building elevations so that the architecture is enhanced by these elements.
20. Locate the electrical service entrance section (S.E.S.) inside the building.
21. Exposed conduit, piping, etc. is not allowed unless a creative conduit surface design that compliments the architecture is reviewed and approved by planning staff.



**LIGHTING:**

- Follow the guidelines listed under appendix E “Photometric Plan” of the Zoning and Development Code.

**LANDSCAPE:****22. Irrigation notes:**

- a. Provide dedicated landscape water meter.
- b. Provide pipe distribution system of buried rigid (polyvinylchloride), not flexible (polyethylene). Use of schedule 40 PVC mainline and class 315 PVC ½” feeder line is acceptable. Class 200 PVC feeder line may be used for sizes greater than ½” (if any). Provide details of water distribution system.
- c. Locate valve controller in a vandal resistant housing.
- d. Hardwire power source to controller (no receptacle).
- e. Controller valve wire conduit may be exposed if the controller remains in the mechanical yard.
- f. Provide temporary irrigation for the native hydro-seed area. Dismantle this irrigation system when germination of hydro-seed is seen.
- g. Repair existing irrigation system in the adjacent public right of ways where damaged by work of this project. Provide temporary irrigation to existing landscape in these frontages for period of time that irrigation system is out of repair. Design irrigation so this frontage is irrigated as part of the system at the conclusion of this construction.

23. Include requirement in site landscape work to de-compact soil in planting areas on site and in public right of way and remove construction debris from planting areas prior to landscape installation.

24. Top dress planting areas with a rock or decomposed granite application. Provide rock or decomposed granite of 2” uniform thickness or less. Provide pre-emergence weed control application and do not underlay rock or decomposed granite application with plastic.

- Under an agreement between the City of Tempe and the State of Arizona, Water Conservation Reports are required for landscape and domestic water use for this project. Have the landscape architect and the mechanical engineer prepare reports and submit them with the construction drawings during the building plan check process. Report example is contained in Office Procedure Directive # 59, available from Building Safety (480-350-8341). Contact Water Conservation Division (480-350-2668) if there are any questions regarding the purpose or content of the water conservation reports.
- Prepare an existing plant inventory for the site and adjacent street frontages. The inventory may be prepared by the Landscape Architect or a plant salvage specialist. Note original locations and species of native and “protected” trees and other plants on site. Move, preserve in place, or demolish native or “protected” trees and plants per State of Arizona Agricultural Department standards. File Notice of Intent to Clear Land with the Agricultural Department (602-364-0935). Notice of Intent to Clear Land form is available at [www.agriculture.state.az.us](http://www.agriculture.state.az.us).
- Indicate the location of all exterior light fixtures on the site, landscape (and photometric) plans. Avoid conflicts with lights in order to maintain illumination levels for exterior lighting.

**SIGNAGE:**

25. Provide address sign on three sides of the building. Match the height of all address signs.

- a. Conform to the following guidelines for building address signs:
  - 1) Compose address signs of 12” high, individual mount, metal reverse pan channel characters.
  - 2) Halo-illuminate each address from dusk to dawn or with light fixture.
  - 3) Coordinate address signs with trees, vines, or other landscaping, to avoid any potential visual obstruction.
  - 4) Do not affix a number or letter to the building that might be mistaken for the address assigned to the building.

- 5) Provide minimum 50 percent contrast between address and the background to which it is attached.
- b. Utility meters shall utilize a minimum 1" number height in accordance with the Tempe electrical code and utility company standards.
- Obtain sign permit for any identification signs as well as for internally (halo) illuminated address signs. Directional signs (if proposed) may not require a sign permit, depending on size. Directional signs are subject to review by planning staff during plan check process.

## **HISTORY & FACTS:**

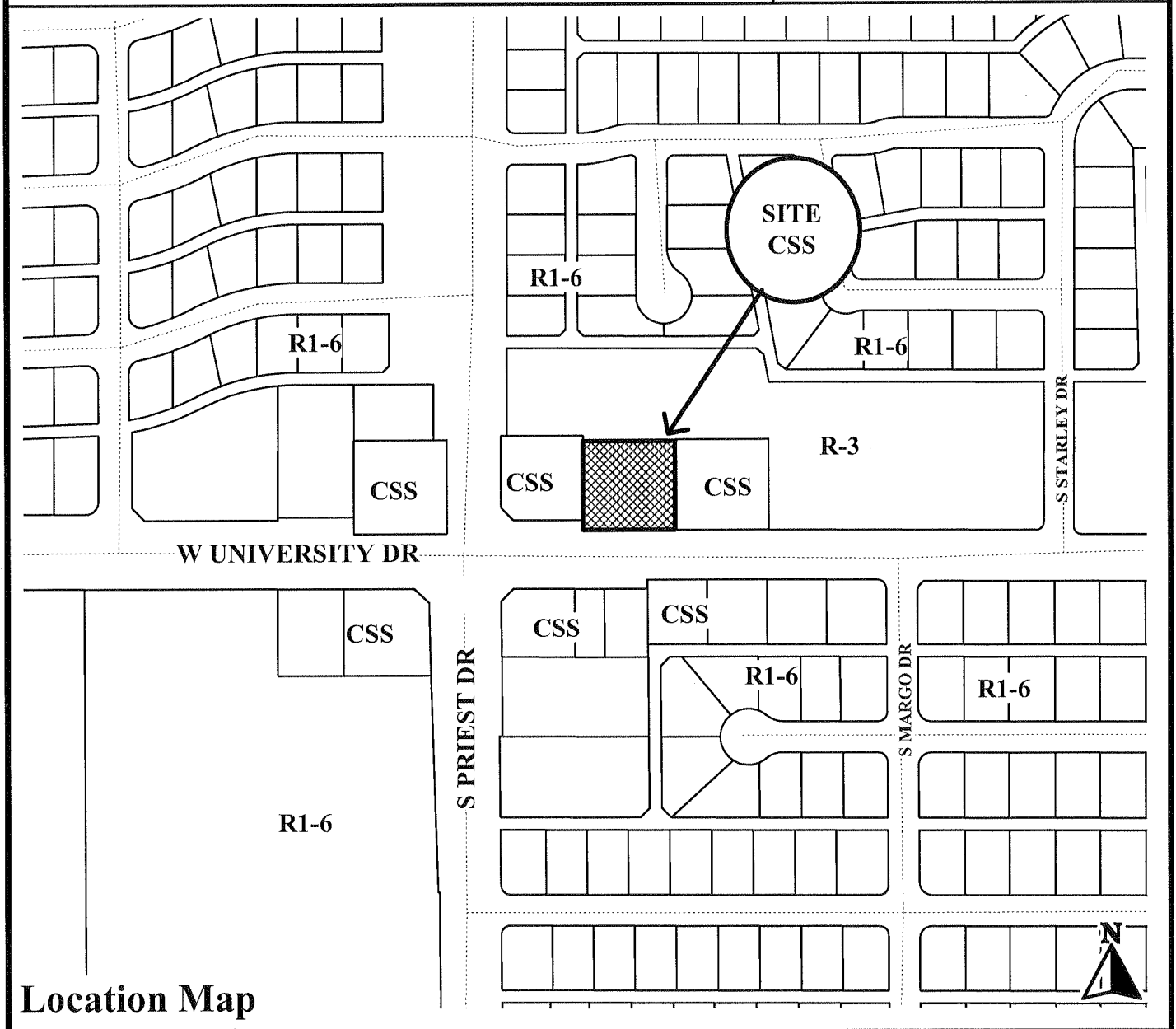
October 19, 1964	Board of Adjustment granted permission to install and operate a coin-operated "Do-it-yourself" car wash in the C-1, Neighborhood Commercial District with a variance in the use regulations of the Zoning Ordinance, located at 1336 West University Drive.
February 20, 1967	Building permit to install two 10,000 gallon tanks and equipment to be used as gasoline dispensing service station.
January 20, 2005	Zoning and Development Code adopted, combining the CCR, C-1 and C-2 zoning districts into CSS, Commercial Shopping and Service District. Car wash uses are now permitted subject to approval of a use permit within this district.
February 27, 2007	Development Review Commission continued, at the request of the applicant, a Use Permit and Development Plan Review for SELF-SERVE CAR WASH located at 1336 West University Drive.
March 27, 2007	Development Review Commission continued, at the request of the applicant, a Use Permit and Development Plan Review for SELF-SERVE CAR WASH located at 1336 West University Drive, to June 12, 2007.

## **ZONING AND DEVELOPMENT CODE REFERENCE:**

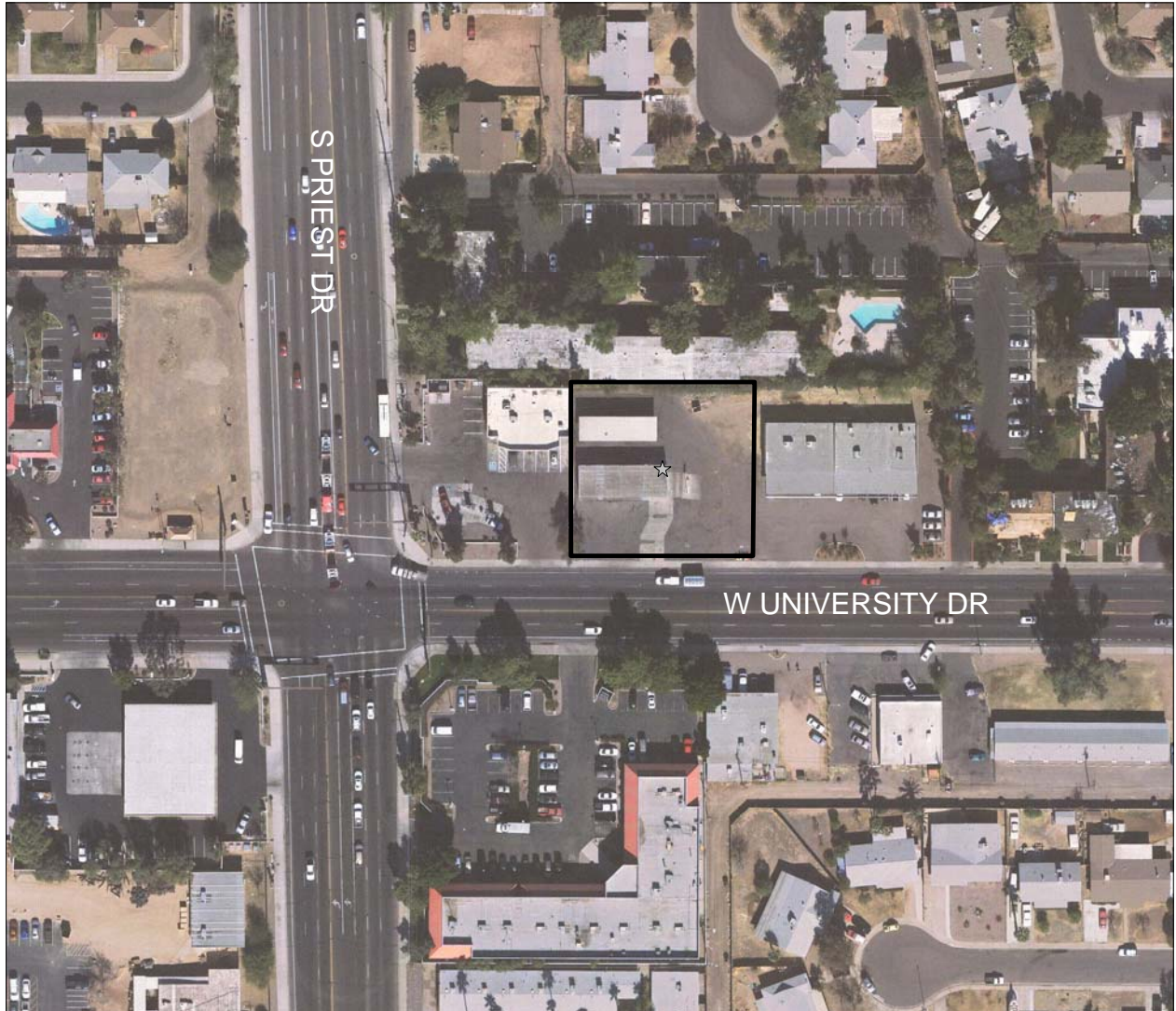
Section 6-306, Development Plan Review  
Section 6-308, Use Permit

**SELF-SERVE CAR WASH**

**PL060720**



**Location Map**



SELF-SERVE CAR WASH (PL060720)

# John Reddell Architects, Inc.

Architecture Interiors Land Planning

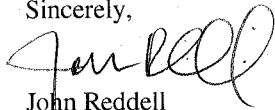
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Self Serve Car Wash  
1336 W. University

## Letter of Explanation

The site is located east of the NEC of University Drive and Priest Drive. The site presently has an existing self serve car wash that is to be demo and the new car wash to be built. The new car wash will consist of (4) self-serve bays and (1) automatic bay, orientation of the car wash east/west will be that the bays do not face University Drive as the existing car wash does. New right of way of 55' is being granted which sets the building back from streets edge. The building is constructed of architectural masonry with an 8x8x16 split face base and 8x4x16 founders block (Hayden Blend) outlined in an 8x8x16 center score block. Metal awnings provide protection to the bill changers and vending machines. A maximum height of 26'-0" for the building at the equipment room and 16'-0" at the car wash bays. The vacuum canopy is located on the west side, a semi cantilever structure with the columns being wrapped in the masonry units same as the main structure. The site walls are constructed of the same masonry units as the main structure.

Sincerely,



John Reddell  
John Reddell Architects, Inc.

DEC 28 2006

# John Reddell Architects, Inc.

Architecture Interiors Land Planning

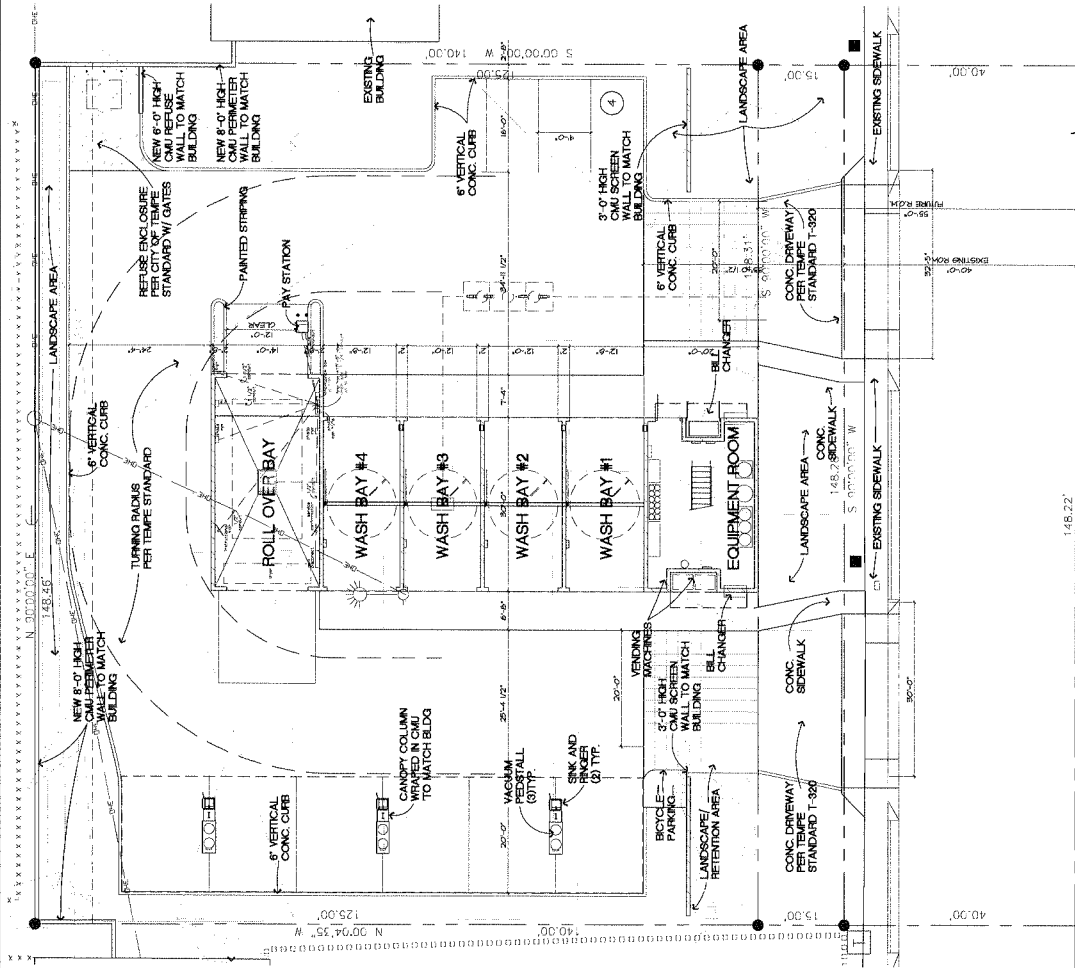
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## LETTER OF EXPLANATION

We are requesting a Use Permit for 1336 W. University Drive. The site is the location of an existing self – serve carwash that was constructed several years ago under the county standards and it was a non-conforming use until the recent modification by the City to the new zoning. At this time the owner is requesting to demo the existing structure and build a new self – serve car wash that requires a Use Permit for the rebuild. We are not changing the use that has been on this property for about 40 years, we are changing to an updated building form that the bays are parallel with University Drive that provides us with a much more aesthetic appeal from the street.

- a) The rebuild of the car wash will not cause any significant vehicular or pedestrian traffic in adjacent areas.
- b) The new vacuum equipment will be quieter than the old existing equipment; dust control better with the entire site landscaped or paved, masonry wall and landscape at the rear of the property where no wall existed before. The car wash will not cause any nuisance (odor, dust, gas, noise, vibration, smoke, heat or glare, etc.) exceeding that of ambient conditions.
- c) The new building for the car wash will be a significant improvement to the existing site and increase in the neighborhood quality. It will not contribute to the deterioration of the neighborhood or be in conflict with the goals, objectives and policies of the City.
- d) The new building will be compatible with existing surrounding structures.
- e) The new building will not result in any disruptive behavior, which may create a nuisance to the surrounding area or general public.

FEB 13 2007

UNIVERSITY AVE  
N 90°00'00" E

# SITE PLAN

SCALE: 1" = 10'-0"

**NORTH**

**SELF SERVE CARWASH**  
1336 W. UNIVERSITY  
TEMPE, ARIZONA

**John Reddell Architects, Inc.**  
Architecture Interiors Land Planning  
2501 North Hayden Road, Scottsdale, Arizona 85257  
Office: (480) 946-0242 Fax: (480) 946-0182 Email: [reddellarchitects@escheelon.com](mailto:reddellarchitects@escheelon.com)



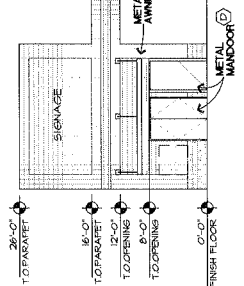
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## REVIEWS

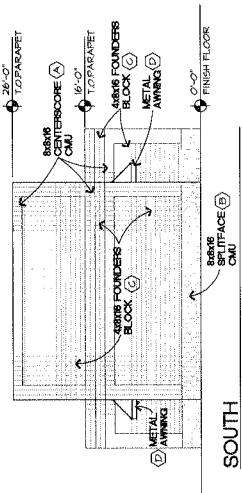
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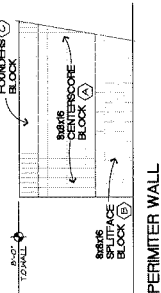
FEB 13 2007



EAST



## SOUTH

$$1/g^2 = 1' = 0^2$$
$$1/\beta^2 \approx 1 - 0^2$$


REFUSE WALL

MATERIAL / COLOR SCHEDULE	
2	6"x6"x6" CENTERCORE CRE CHU NATURAL (SEALED)
3	6"x6"x6" SPLTACE NATURAL (SEALED)
4	6"x4"x6" FINDER'S BLOCK SUPERLITE BLOCK HATCHER BLEND
5	HELLOKON METAL DOORS AND FRAMES, LIGHT METAL FINISHES DUNELPAPER DCA 60 DUNELPAPER COLO DUNELPAPER COLO
6	WINDOW SYSTEM DUNELPAPER COLO DUNELPAPER COLO

NOTE: WINDOW SYSTEM  
DARK BRONZE ALUMINUM FRAME  
W/ BRONZE TINTED GLASS

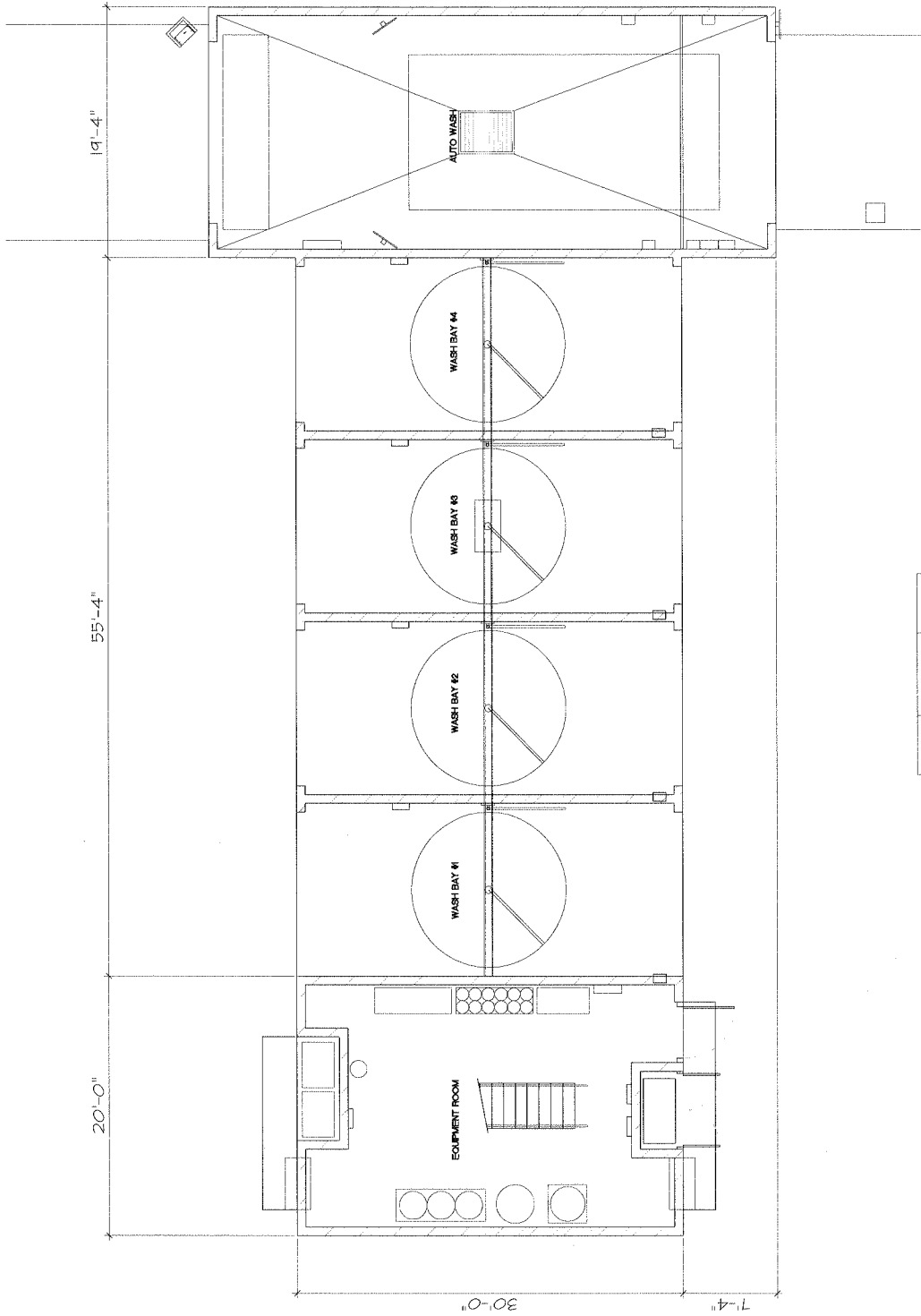
**John Reddell Architects, Inc.**  
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Date: 9/3/03



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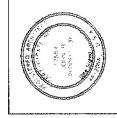


FLOOR PLAN

1/8"=1'-0"

**SELF SERVE CARWASH**  
1336 W. UNIVERSITY  
TEMPE, ARIZONA

**John Reddell Architects, Inc.**  
Architecture Interiors Land Planning  
2501 North Hayden Road, Scottsdale, Arizona 85257  
Office: (480) 946-0242 Fax: (480) 946-0182 Email: reddellarchitects@eschelon.com



Date: 9/3/03  
Revised:

**B**

JAN 25 2007

# LANDSCAPE LEGEND

TREES	SPECIES	SIZE/QTY
ACACIA STENOPHYLLA		2" CAL./5
SHOE STRING ACACIA		1" CAL./5
OLEA EUROPAEA 'SWAN HILL'		2" CAL./2
SWAN HILL OLIVE		1" CAL./2
SHRUBS	SPECIES	SIZE/QTY
MUHLENBERGIA RIGENS		5 GAL./16
DEER GRASS		5 GAL./7
LEUCOPHYLLUM LAEVIGATUM		5 GAL./19
CHIHUAHUA RAIN SAGE		
HESPERALOE PARVIFLORA		
RED YUCCA		
GROUNDCOVERS	SPECIES	SIZE/QTY
LANTANA SPECIES		1 GAL./16
GOLD LANTANA		
LANTANA SPECIES		1-GAL./17
PURPLE LANTANA		
SURFACE MATERIALS	SIZE/QTY	
DECOMPOSED GRANITE 1/2" SCREENED		
SIERRA GOLD - PIONEER OR APPROVED EQUAL		
2" DEPTH IN ALL NO PAVED OR BUILDING AREAS		

NOTE: ALL SHRUBS WITHIN THE "LOW SHRUB ZONE" MUST COMPLY WITH THE TEMPE APPROVED PLANT LIST

# IRRIGATION SCHEDULE

PLANT TYPE	PLANT SIZE	GPH PER OUTLET	# OF TOTAL GPM PER PLANT
TREES	15 GAL.	2 GPH	3
TREES	24" BOX	2 GPH	4
TREES	36" BOX	2 GPH	5
TREES	48" BOX	2 GPH	6
SHRUBS	5 GAL.	1 GPH	2
SHRUBS	1 GAL.	1 GPH	1
AND G.C.			

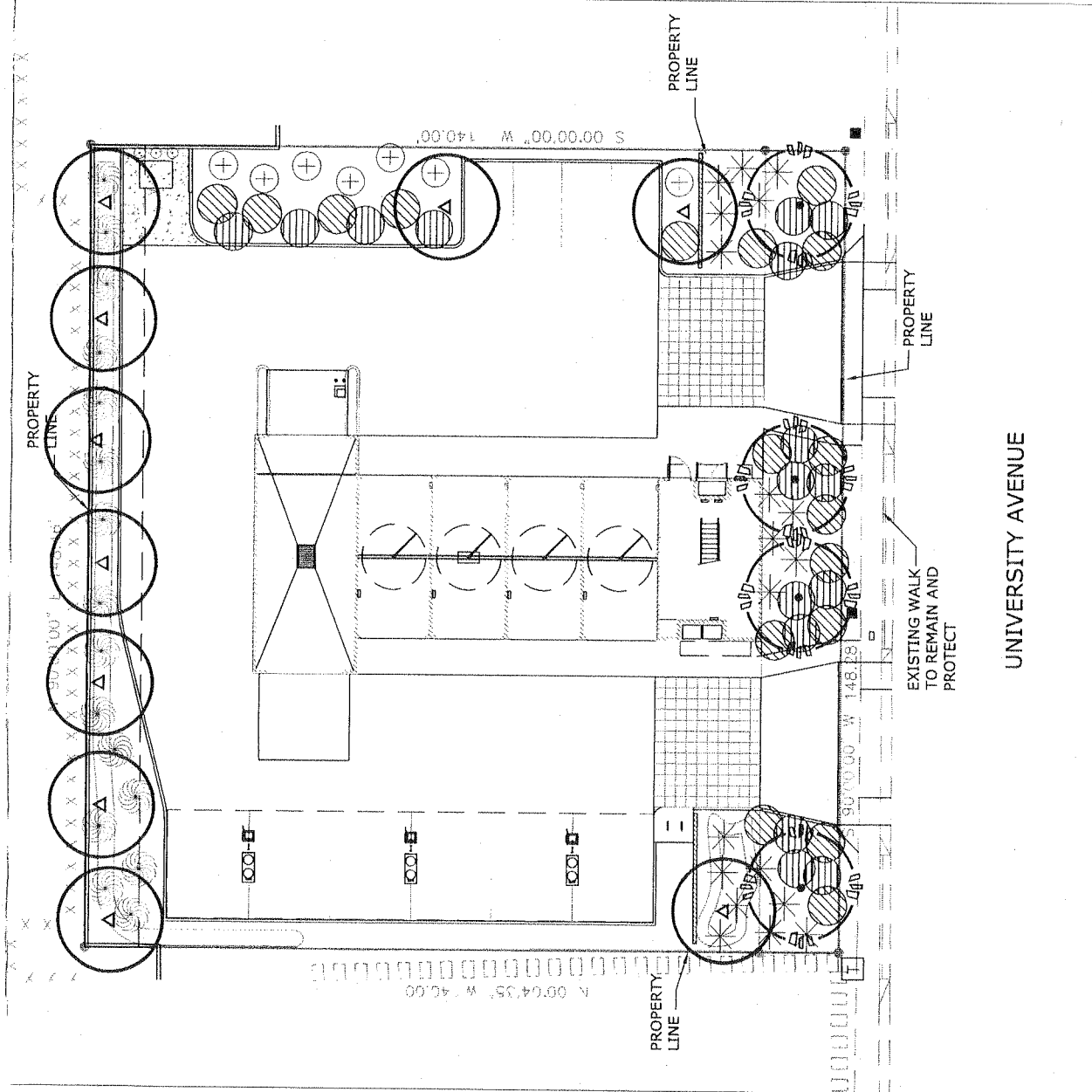
# PIPE LEGEND

PIPE SIZE	GPM	CLASS
1/2"	4.22	CLASS 200 PVC
3/4"	8	.5" MIN. LATERALS
1"	12	SCHED. 40 PVC
1-1/2"	30	1" MIN. MAINLINE
2"	50	SCHED. 40 PVC
		2" MIN. SLEEVE

D=DRIP/T=TURF/PD=PALMS DRIP VALVE SIZE

# DRIP EQUIPMENT

RAINBIRD 100-PEB-PRS-B ELECTRIC VALVE



UNIVERSITY AVENUE

# LANDSCAPE PLAN

SCALE 1" = 20'

# **HAMBLIN SELF SERVICE CARWASH** **GRADING & DRAINAGE**

## SITE PLAN NOTES

- [illegible]

### LEGEND

9. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING OR DEDICATING ALL REQUIRED RIGHTS-OF-WAY AND EASEMENTS TO THE CITY PRIOR TO APPROVAL OF IMPROVEMENT PLANS.

• WATER METEOR

- [illegible]

## ENCHIRIDION

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2. SUMPTS IN WATER LINES SHALL BE LOCATED AT THE MIDPOINTS.
3. BACK FILLING SHALL NOT BE STARTED UNTIL LINES ARE APPROVED BY THE ENGINEERING DIVISION
4. IF A BACKFLOW PREVENTION ASSEMBLY IS REQUIRED TO BE INSTALLED, IT SHALL BE INSTALLED PRIOR TO ANY BACKFILLING OF THE LINE AT ANOTHER LOCATION. SEE SPECIFICATIONS FOR DETAILS AND REQUIREMENTS.  
A. ALL PUBLIC WATER LINES SHALL BE CLASSED 8" DIPS PROTECTED WITH POLYETHYLENE GLASS REINFORCED PROTECTION PER MAG SPECIFICATION 670  
B. ALL NEW WATER AND SEWER CONNECTIONS TO EXISTING LINES SHALL BE BORED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER
7. ALL ON-SITE SEWER EFFLUENTS ARE CONSIDERED UNSAFE UNLESS OTHERWISE NOTED ON PLANS AND MUST BE APPROVED BY THE CITY OF CHICAGO

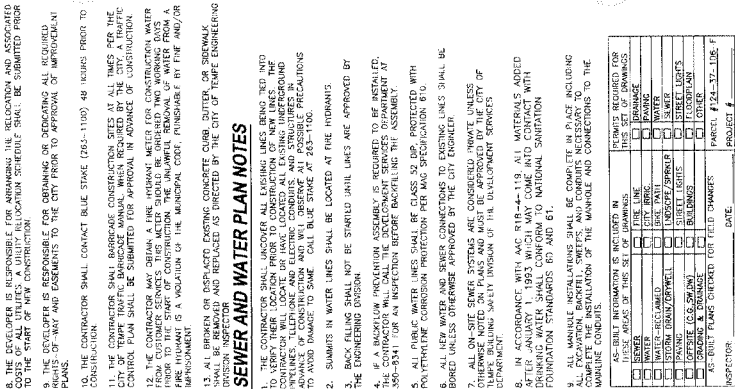
**ARCHITECT:**

8. IN ACCORDANCE WITH AC R16-4-119, ALL MATERIALS ADDED DURING JANUARY 1, 1993 WHICH MAY COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.
9. ALL MANHOLE INSTALLATIONS SHALL BE COMPLETE IN PLACE INCLUDING ALL PAVEMENT, BACKFILL, SWEEPS, AND CURBSETS NECESSARY TO PROTECT THE PUBLIC FROM UNDESIRABLE INSTALLATION OF THE MANHOLE AND CONNECTIONS TO THE MANHOLE CONDITS.
- | AS-BUILT INFORMATION IS INCLUDED IN      |                                      | PERMITS REQUIRED FOR THIS PROJECT |                          |
|--|--------------------------------------|-----------------------------------|--------------------------|
| THIS SET                                 |                                      | OTHER PERMITS                     |                          |
| <input type="checkbox"/> EXISTER         | <input type="checkbox"/> USE LINE    | <input type="checkbox"/> EROSION  | <input type="checkbox"/> |
| <input type="checkbox"/> WATER           | <input type="checkbox"/> DIST. RIDG. | <input type="checkbox"/> PLACING  | <input type="checkbox"/> |
| <input type="checkbox"/> WATER RECLAIMED | <input type="checkbox"/> DIST. PATH  | <input type="checkbox"/> PAVER    | <input type="checkbox"/> |

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| ROUTING SLIP                             | DATE                                  |
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| <input type="checkbox"/> OTHER           | <input checked="" type="checkbox"/> A |
| PROJECT #                                | <input checked="" type="checkbox"/> A |
| AS BUILT PLANS CHECKED FOR FIELD CHANGES | <input checked="" type="checkbox"/> A |
| INSPECTOR                                | DATE                                  |

2  
AT A POINT ON

- ALLEN  
CONSULTING  
ENGINEERS, INC.**  
1336 W. UNIVERSITY DR.  
TEMPE, ARIZONA
- PHONE (480) 844-1666  
FAX (480) 830-9453  
E-MAIL: [allen@allenconsulting.com](mailto:allen@allenconsulting.com)
- PRELIMINARY GRADING & DRAINAGE
- | JOB NUMBER | SHEET | OF |
|------------|-------|----|
| 90019      | 1     | 1  |



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CALL THE NUMBER FIRST  
BEFORE YOU DIAL

263-1100

1-800-STAKE-IT

19786  
GREGORY L  
ALLEN

NOV 19 1978  
FBI - ALBANY

COMPANY TIT.	CONTROLLED	OWNED	LEGAL DESCRIPTION
			ESTIMATED QUANTITIES

[illegible]

**CONSTRUCTION NOTES**

PARCEL NO. 2  
BEGINNING AT A POINT ON THE SOUTH LINE OF TRACT "A," D BAR L RANCHES,  
COUNTY OF SAN JUAN, STATE OF NEW MEXICO.

V  
ELECTRIC UTILITY COMPANY

A

- ALLEN  
CONSULTING  
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- PHONE (480) 844-1666  
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E-MAIL: [allen@allenconsulting.com](mailto:allen@allenconsulting.com)
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- | JOB NUMBER | SHEET | OF |
|------------|-------|----|
| 90019      | 1     | 1  |

**APPROVAL FOR DRAINAGE ONLY RETENTION CALCULATIONS\***

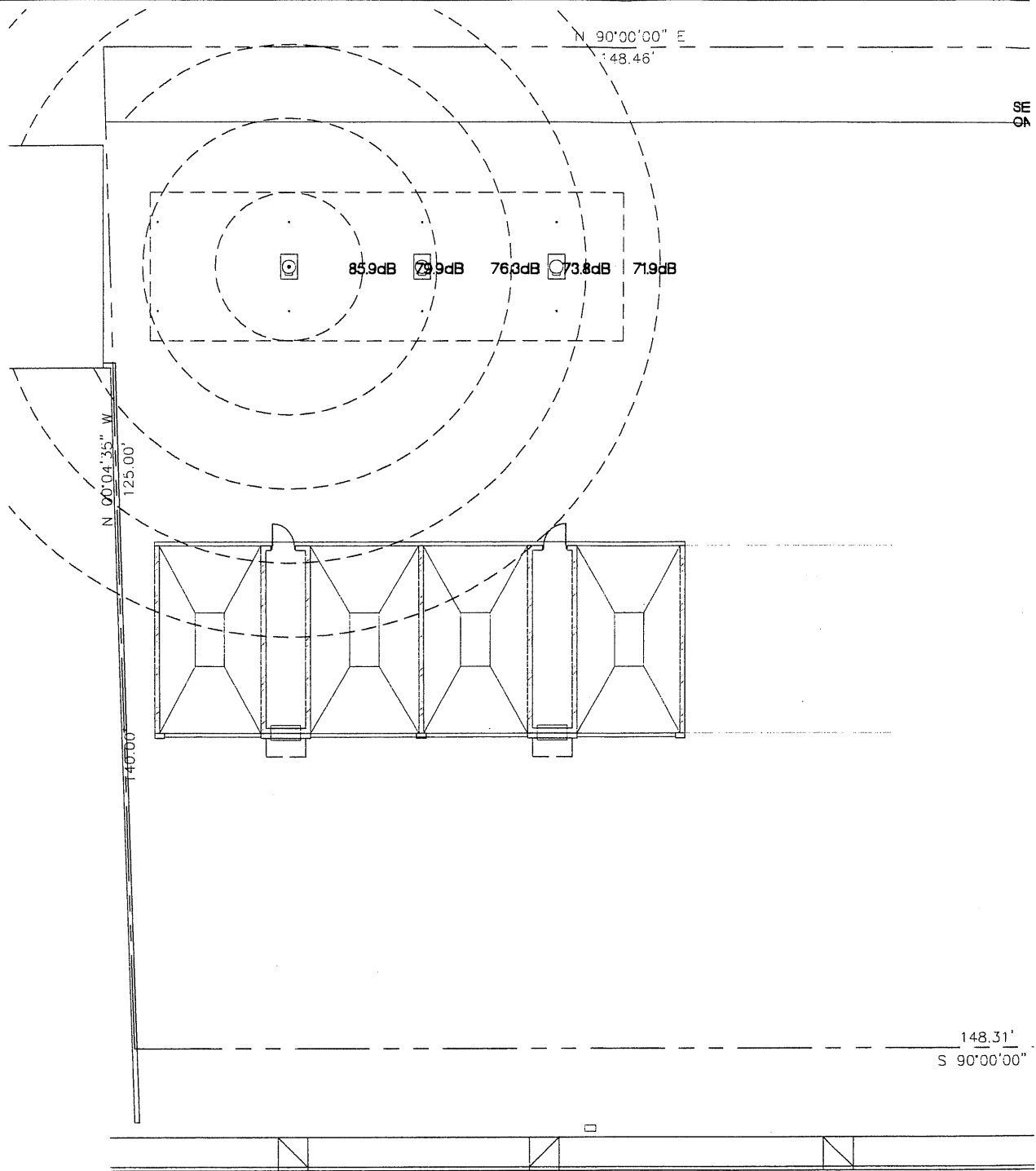
1000 W. UNIVERSITY DR.  
TEMPE, ARIZONA  
PRELIMINARY GRADING & DRAINAGE

**RETENTION CALCULATIONS\***

\*PER CITY OF TAMPA METHOD     $30.732 \cdot T^{0.47(1)} \cdot (0.95)^{\frac{L}{T}}$  = 3.947 C.F.

RETENTION PROBLEMS =  $\frac{(28+14431)}{Z}$  = 20.24' @ 3.563 C.F.





UNIVERSITY AVE

Vacu  
@ E

**F SERVE CARWASH**

1336 W. UNIVERSITY  
TEMPE, ARIZONA

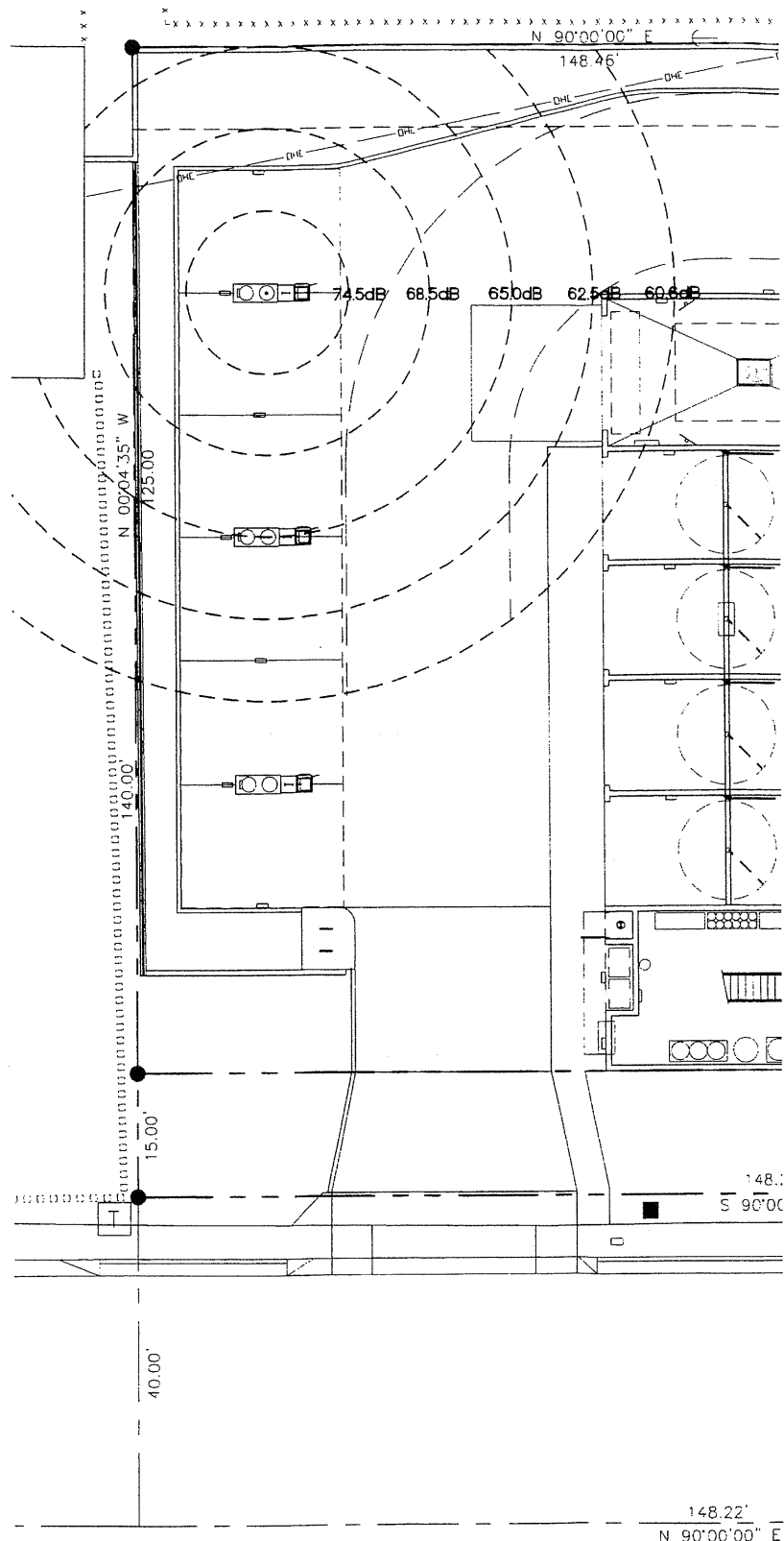
**John Reddell Arch**  
Architecture Interiors

2501 North Hayden Road, Scottsdale  
Office: (480) 946-0242 Fax: (480) 946-0182 Email: re

# Calculated Sound Levels at Typical Distances

- 1) All calculations based on data obtained from testing on standard 9200, 9210, and 9213 vac models with metal domes to assume a worst case scenario.
- 2) Calculations assume an open field condition on a reflective surface (i.e. concrete). Nearby reflective surfaces such as walls may affect actual sound levels.
- 3) Data is to be used as an approximation only. Actual sound levels may vary based on environmental and site-related conditions.

2 Motor Vac - Small Dome																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	76.4	70.4	66.9	64.4	62.4	60.9	59.5	58.4	57.3	56.4	55.6	54.9	54.1	53.5	52.9	
Sealed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	80.5	74.5	71.0	68.5	66.5	64.9	63.6	62.4	61.4	60.5	59.7	58.9	58.2	57.6	57.0	
Attachment Removed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	74.8	68.8	65.0	62.5	60.6	59.0	57.6	56.5	55.4	54.5	53.7	52.9	52.3	51.6	51.0	
2 Motor Vac - Large Dome																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	78.2	72.2	68.7	66.2	64.3	62.7	61.3	60.2	59.1	58.2	57.4	56.6	56.0	55.3	54.7	
Sealed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	84.2	78.1	74.6	72.1	70.2	68.6	67.2	66.1	65.1	64.2	63.3	62.6	61.9	61.2	60.6	
Attachment Removed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	78.8	72.8	69.3	66.8	64.9	63.3	62.0	60.9	59.8	58.9	58.1	57.3	56.6	56.0	55.4	
3 Motor Vac - Large Dome																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	81.3	75.3	71.8	69.3	67.4	65.8	64.4	63.2	62.2	61.3	60.5	59.7	59.0	58.4	57.8	
Sealed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	85.9	79.9	76.3	73.8	71.9	70.3	69.0	67.8	66.8	65.9	65.1	64.3	63.6	63.0	62.4	
Attachment Removed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	79.6	73.6	70.1	67.6	65.7	64.0	62.7	61.5	60.5	59.6	58.8	58.0	57.3	56.7	56.1	
Dual Vac, Both Sides in Operation (Approximate - Derived From 2 Motor Large Dome Data)																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	81.2	75.2	71.7	69.2	67.3	65.7	64.3	63.2	62.1	61.2	60.4	59.6	59.0	58.4	57.8	
Sealed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	87.2	81.1	77.6	75.1	73.2	71.6	70.2	69.1	68.1	67.2	66.3	65.6	64.9	64.2	63.6	
Attachment Removed																
Attachment	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	
Sound Level (dB)	81.3	75.3	71.8	69.3	67.4	65.8	64.4	63.2	62.2	61.3	60.5	59.7	59.0	58.4	57.8	



**SELF SERVE CARWASH**  
1336 W. UNIVERSITY  
TEMPE, ARIZONA

**John Reddel**  
Architecture In  
2501 North Hayden R  
Office: (480) 946-0242 Fax: (480)



John Reddell Architects, Inc.  
Mr. John Reddell  
2501 N. Hayden Rd, Suite 103  
Scottsdale, AZ 85257

May 30, 2007

Dear Mr. Reddell:

**ACS** has been retained to assess the potential noise impact from the proposed Hamblin Car Wash (on 1336 University Dr. in Tempe) to the nearest residential properties - primarily the adjacent apartment building to the north.

**TECHNICAL TERMS:**

*Ambient-* (As used in this report) Typical background noise associated with a given environment excluding the specific noise under investigation and the transient noise from isolated identifiable sources.

*Decibel* - A unit for measuring the intensity of sound. The human hearing range is from 0 dB (the theoretical threshold of audibility) to 130 dB (the average pain threshold). {The sound pressure level in decibels is equal to 10 times the logarithm (to the base 10) of the ratio between the pressure squared divided by the reference pressure squared. The reference pressure used in acoustics is 20 microPascals.}

*dBA* - Sound pressure level expressed in decibels, filtered or weighted at the various frequencies to approximate the response of the human ear.

**CHANGES IN INTENSITY LEVEL**

Changes in Intensity Level, dB	Changes in Apparent Loudness
1	Almost imperceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

**NOISE STANDARDS:**

Typical municipal ordinances set not-to-exceed limits and consider instantaneous noise levels below 50 to 55 dBA at night and 60 to 65 dBA during the day to be acceptable.<sup>1</sup>

MAY 30 2007

City of Tempe

Sec. 20-6. Allowable noise levels.

(a) It is unlawful for any person to create any noise which would cause the noise level measured at either the property line or the area of the property affected by the noise emission to exceed the following community noise standards:

**NOISE STANDARD**

Zone	Time	dB(A)
Residential	10:00 p.m. — 7:00 a.m.	45
	7:00 a.m. — 10:00 p.m.	55
Commercial	10:00 p.m. — 7:00 a.m.	55
	7:00 a.m. — 10:00 p.m.	65
Industrial	10:00 p.m. — 7:00 a.m.	60
	7:00 a.m. — 10:00 p.m.	70

(b) If the measurement location is on a boundary between two (2) zoning districts, the lower noise standard shall apply.

(c) If the ambient noise level in a residential zoned location is measured and found to be 40 dB(A) or less between the hours of 10:00 p.m. and 7:00 a.m. then the actual ambient noise level will be the community noise standard.

(d) If the ambient noise level, in any zoning district is measured and found at any time to be in excess of the community noise standard described in part (A) of this section, then the actual ambient noise level will be the community noise standard.

(e) A noise level which exceeds the community noise standard by five (5) dB (A) or more, when measured at the affected area, the nearest property line, or in the case of multiple-family residential buildings, when measured anywhere in one dwelling unit with respect to a noise emanating from another dwelling unit or from common space in the same building, shall be deemed a prima facie violation of this chapter.

**FINDINGS:**

Ambient noise level measurements were performed at the site's north property line adjacent to the apartment building. The existing ambient levels were as follows.

Time	Ambient			Other
	Minimum	Typical	Maximum	
9:30 am	55 dBA	60-63 dBA	70 dBA	Aircraft: 65-68 dBA
2:30 am	48 dBA	50-56 dBA	71 dBA	



The existing car wash facility's wash bays are oriented north/south towards the apartment building. All of the existing vacuums are along the northern perimeter, approximately 30' from the property line. There is currently no barrier wall at the property line. The proposed redevelopment will orient the wash east/west so that it is not open to the apartment building, relocate the vacuums along the western perimeter of the property, and construct a barrier wall along the north property line.

To determine the potential noise impact after redevelopment, noise level measurements were taken at an existing facility utilizing comparable equipment and layout (Justin's Car Wash on Kyrene). Based on these measurements, the apartment building could be impacted by as much as 51 dBA for the first floor residents and 68 dBA for the second floor residents.

To help further protect the second floor residents, we have discussed constructing enclosures for the vacuum units. These enclosures constructed of plywood (or better) would reduce the noise impact to the worst case apartment units to at least 42.5 dBA.

#### **CONCLUSIONS:**

Based on the measurements performed at a similar facility, the noise impact to the first floor apartment units is within the typical, nighttime ambient noise level. With the construction of the vacuum enclosures, the maximum equipment noise impact to the worst case residential units is 42.5 dBA. This is in compliance with typical municipal standards, the minimum nighttime ambient and the city's nighttime noise ordinance.

If you have any questions or concerns, please call (480) 827-1007.

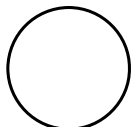
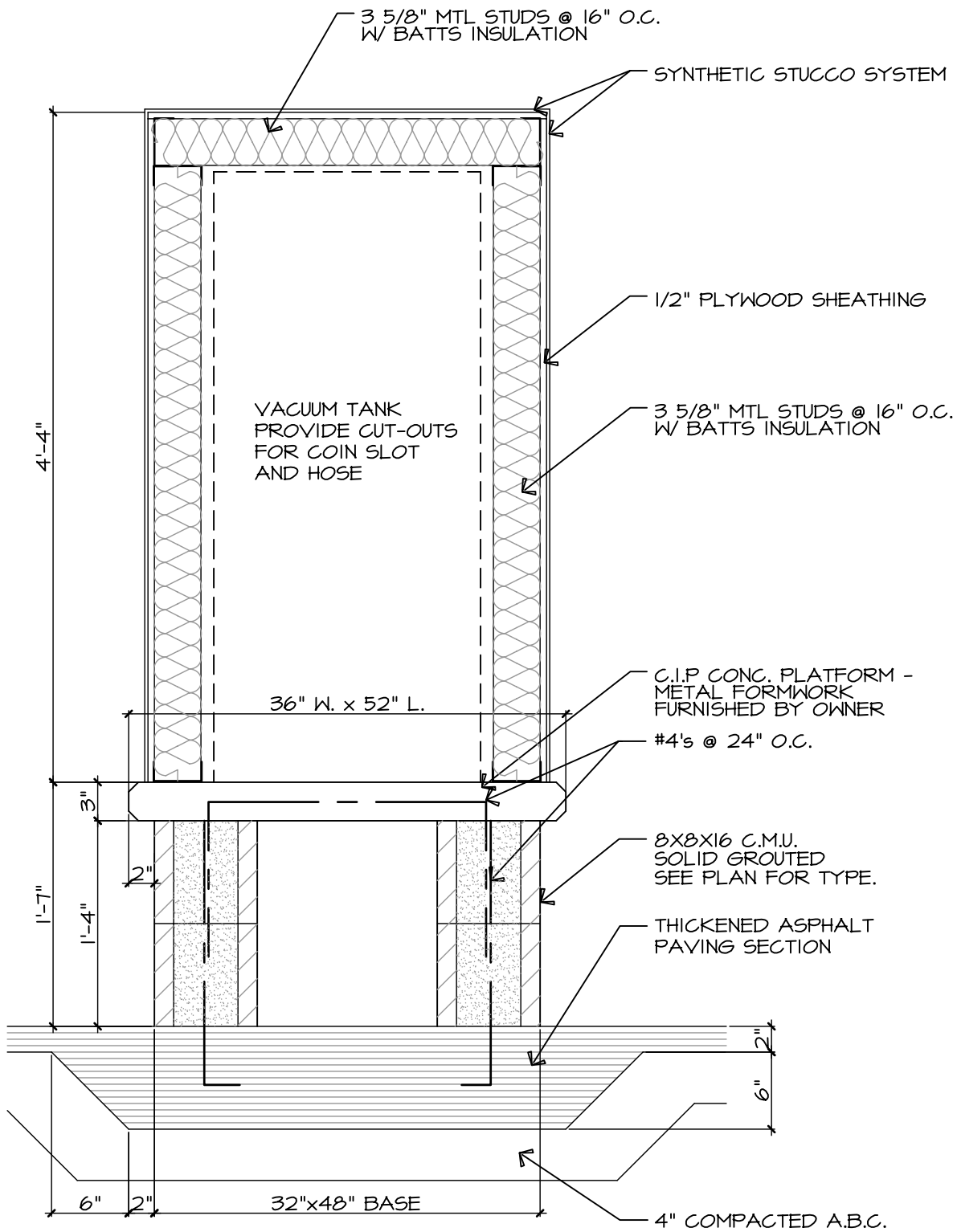
Respectfully,



**Tony Sola**

Acoustical Consulting Services

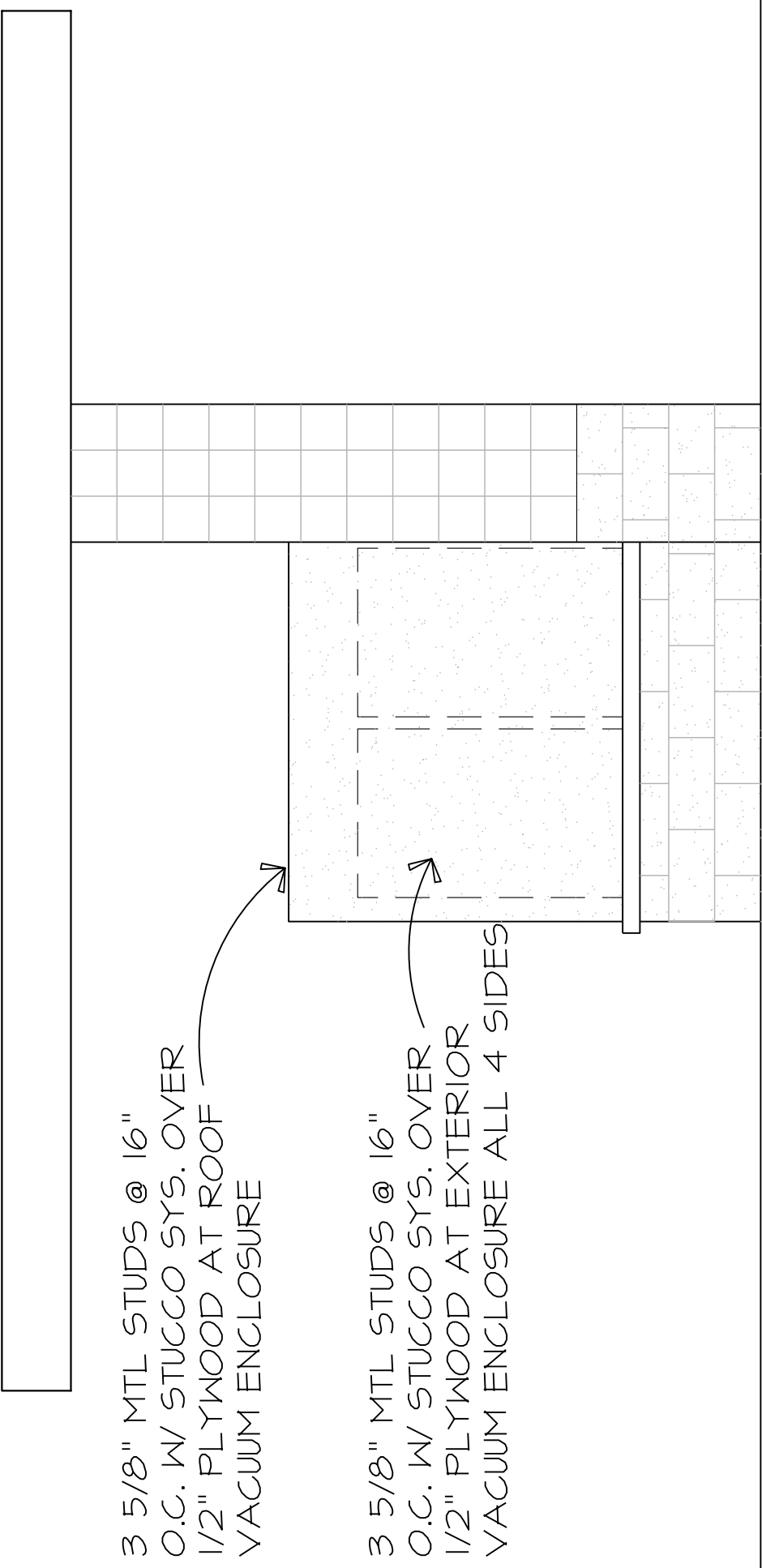
1. Handbook of Environmental Acoustics, James P. Cowan, 1994, pp. 217-218.



# **FULLY ENCLOSED VACUUM PEDESTAL SECTION**

11/VACPED

1"= 1'-0"



ELEVATION @ FULLY ENCLOSED VACUUM PEDESTAL